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William J. Davis, Esq.			TRAN LIEN, THUY	
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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/761,041 Filing Date: January 16, 2001

Appellant(s): O'REILLY, JAMES PHILLIP

MAILED

DEC 0.7 2006

GROUP 1700

Dr. Walter Katz	
For Appellant	•

#### **EXAMINER'S ANSWER**

This is in response to the appeal brief filed January 16,2004 and the insertion filed 7/11/06 appealing from the Office action mailed June 4,2003

# (1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

#### (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

### (5) Summary of Invention

The summary of invention contained in the brief is correct.

#### (6) Issues

The appellant's statement of the issues in the brief is correct.

# (7) Grouping of Claims

Appellant's brief includes a statement that claims 10,12, and 13 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

# (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

## (9) Prior Art of Record

US 4,166,141

Westermann et al.

08-1979

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## (10) Grounds of Rejection

Claims 10 , 12 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s),at the time the application was filed, had possession of the claimed invention. Applicants have not sufficiently disclosed specificational basis for the phrase "periodically regenerating fresh PVPP."

While the specification refers to regenerating PVPP, there is no mention of "fresh PVPP."

Claims 10, and 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no antecedent basis for the amended phrase "the main flow" found in the preamble of claim 10.

Claims 10, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Westermann et al. (U.S. Pat. No. 4, 166, 141) (hereinafter Westermann), alone, or in view of applicant's admissions (instant specification, pages 1-3).

Westermann teaches the chill stabilizing of a malt beverage whereby a vessel 1 contains PVPP having a size of about 1 mm and beer Sows up through said vessel in a continuous fashion. The beer exits from through line 6 to a "wash station 7" that includes a solid-liquid separation device such as a filter or centrifuge. The PVPP concentrate then flows through line 10 to a regeneration stage 11 where the PVPP is

washed with sodium hydroxide to remove the absorbed material. The regeneration station also contains a filtration device. This process removes proteinaceous material and tannins to eliminate the development of chill haze (col. 2, lines 15 to 68).

Westermann discloses that which is cited above but does not teach the amount of P'VPP that would be used, or the amount of PVPP that is removed by the centrifuge.

It would have been obvious to one of ordinary skill in the art to vary the amount of PVPP used since it is well within the skill of a brewmaster to optimize and adjust the amount of a clarifying agent to produce the desired end product. Further, it is considered that it would be an obvious modification to optimize the amount of PVPP removed by the centrifuge (by varying the flow speed) so that the resultant product would have the requisite clarity.

The fact that applicant now claims "the main flow" rather than --a main flow-- is not seen as further distinguishing the claims because the scope of the phrase is still broad. Further, the Board stated on page 7 of their Decision, "[I]ndeed the only 'main flow' of a beverage in Westermann which includes the combination of beer and PVPP is found in line 6 of Westermann."

The Board also stated, on page 4 of their Decision, that the "background prior art raises the question as to whether or not it would have been obvious to a person of ordinary skill in this art at the time of appellant's invention to utilize a centrifuge in place of the prior art filter system." Therefore, in the alternative, it would have been obvious to one of ordinary skill in the art to modify the Westermann process so that the entire quantity of beer is processed using a centrifuge because Westermann teaches that

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filters and centrifuges are equivalents (col. 3, lines 3-1 1) and the prior art acknowledges that beer is commonly filtered to remove PVPP.

#### WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

The rejection of claims 10-13 under 35 U.S.C. 1 12, first paragraph, as directed to the phrase "continuous process" in the Office Action mailed December 19, 2002 and "having a particle size of at least 10 µm" is withdrawn in both the Office Actions mailed December 19,2002 and June 4,2003, since the phrases do have support in the specification as stated by Appellant on page 4 of the Appeal Brief.

#### (11) Response to Argument.

Regarding the rejection of claims 10,12, and 13 made under 35 U.S.C. 112, first paragraph, directed to the term "periodically regenerating fresh PVPP" in claim 10, while there is specificational basis for *periodically regenerating* of PVPP, there is no specificational basis for "fresh" PVPP. PVPP is not disclosed as being "fresh" or is "fresh" described in the specification in such a way as to reasonably convey to one skilled in the relevant art the meaning of "periodically regenerating fresh PVPP".

Regarding the rejection of claims 10,12, and 13 made under 35 U.S.C. 112, second paragraph, there is no antecedent basis for the amended phrase "the main flow" in the preamble of claim 10. It is not clear to which main flow this refers. The specification describes "the main flow" as lines 18 and 24, or the beer/PVPP flow the

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flows into the centrifuge and the filtered beer that flows out of the centrifuge. (See Page 7, lines 11-13,26-27).

Regarding the rejection of claims under 35 U.S.C. 103 (a), Appellant states that the main pipeline flow of beer in Westermann is from inlet 4 to outlet 5 via the PVPP bed 1 with only a small part of this main flow is taken off to either a centrifuge or filter system. Appellant contends that since the separation method selected is optional, this illustrates that Westermann had not appreciated the advantages of using a centrifuge in the main high volume flow stream. As stated by the Board on page 4 of their Decision regarding the parent application 08/412,037, the "background prior art raises the question as to whether or not it would have been obvious to a person of ordinary skill in this art at the time of appellant's invention to utilize a centrifuge in place of the prior art filter system." As stated in the rejection, Westermann teaches that filters and centrifuges are equivalents (col. 3, lines 3-11) and the prior art acknowledges that beer is commonly filtered to remove PVPP. It is further noted that in the portion of Westermann cited in the rejection(col. 3, lines 3-11), Westermann explicitly teaches the flow rates into a given separation device is correlated with the capacity of the device so that materials are completely removed from one another during the residence time in the device. Thus, one would have some expectation of success in choosing a centrifuge for separation, since Westermann recognized the filter and centrifuges as equivalents, and one would have had some expectation of success in selecting or sizing either of the two equivalent separation devices, to attain a desired residence time for a desired degree of separation, given a fixed flow rate.

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With respect to Appellant's assertion that the main flow of Westermann is defined by line 5 and that it will carry over large amounts of particles, neither Westermann nor any other evidence of record teaches there will be any carry over from the process of Westermann. Furthermore, Westermann has not defined "the main flow" as line 5.

Appellant has defined "the main flow" as a beer/PVPP flow the flows into a centrifuge and the beer that flows out of a centrifuge(See Page 7, lines 11-13,26-27). In light of this definition in Appellant's specification, the main flow of Westermann is line 6 since this is the line containing the beer/PVPP that is fed into the centrifuge. As also stated by the Board on page 7 of their Decision, "[I]ndeed the only 'main flow' of a beverage in Westermann which includes the combination of beer and PVPP is found in line 6 of Westermann."

Appellant further contends that the claimed invention is directed to a continuous process with PVPP particles of a specific size that is continuously centrifuged to remove at least 95% of the PVPP therefrom to form the main flow of stabilized beer, and in contrast, Westermann does not teach or suggest the invention. However, Westermann does meet this limitations in the areas cited in the Office Action mailed December 19,2002 col.2, lines 15-68 and col.3., lines 3-11. Additionally, as stated by the Board in the Decision on page 5, "Like the claimed invention, Westermann describes a prior art method for stabilizing a beverage, such as beer, by contacting the beverage with PVPP. Westermann does this by passing the beer through a fluidized bed of PVPP. Importantly, as shown in Westermann's Figure and as described in the patent at column 1. lines 47 through 50 and column 2, lines 48 through 57, a portion of the fluidized bed

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which contains "residual bear" is continuously removed through a line 6, and this beer/PVPP stream is conducted to a wash station 7 which may include a centrifuge, where the residual beer is washed from the absorbent PVPP particulates and wherein the absorbent PVPP particles are concentrated in a second flow which is delivered to a regeneration station 11." Most importantly, Westermann teach the main flow entering a centrifuge, and that flow rate into separations devices are correlated with the capacity of a given device so that liquids and solids are *completely* removed from one another during the residence time in the device.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Lautran for

RAM

11/26 / J<del>anuary 4,</del> 2006

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